

Resilience of Chronic Renal Failure Patients Undergoing Hemodialysis in Medan, Indonesia

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Abstract: Chronic renal failure (CRF) is a failure of kidney function that progresses slowly and can't recover so the body is unable to maintain the metabolic, fluid and electrolyte balance in the body. Haemodialysis therapy is used as one of the renal replacement therapy in CRF patients to prevent dangerous complications that can lead to death. Patients suffering from chronic renal failure who underwent haemodialysis will face psychological, financial, physical and social suffering. The patient will experience a meaningless state in which this situation will lead the patient to the process of seeking meaning in suffering so that there is a need for resilience in the face of his illness. This study aims to identify the resilience of patients with chronic renal failure who underwent haemodialysis in Medan. Methods: the population in this study were patients with chronic renal failure with a sample of 117 people using accidental sampling technique. Data were collected using questionnaires and analysed by frequency distribution. The result showed that 84 of 117 responders were in medium resilience (71.8%). Based on the results of the study can be concluded that patients who experience chronic renal failure in Medan have

1 INTRODUCTION

A hemodialysis is a form of replacement therapy in patients with kidney failure, both acute and chronic. Patients suffering from renal failure are assisted with the aid of a haemodialysis machine that takes over the kidney function. Patients with renal failure who undergo haemodialysis therapy, take 12-15 hours to dialysis each week, or at least 3-4 hours per treatment. This activity will take place continuously throughout his/her life (Asiah, 2005).

Charuwanno suggests that the continued use of haemodialysis therapy throughout his/her life can lead to feelings of discomfort to the sufferer, increase stress and affect the quality of life, including psychological health. (Charuwanno, 2005) Increased levels of stress experienced by hemodialysis patients are caused by financial problems due to a decrease in health conditions, difficulties in maintaining work, sexual ability to disappear and impotence, relationships with spouses and fear of death (Asiah, 2005).

The results of Hanim's study showed that 18 of the 27 patients undergoing haemodialysis therapy were in the category of severe stress while 9 patients were able to adapt to changes in Rantauprapat hospital. (Hadiningsih, 2014) The condition depends on how far the ability of the patient in adaptation to changes that occur. This condition is known as resilience (Hanim, 2013).

The resilience of patients undergoing hospitalization is a matter that needs to be assessed to achieve a rebalance due to the changes that happened. Feelings of despair and helplessness are often faced by patients because various treatments cannot help him/her recover from chronic illness. The state of severe stress can also arise due to the unpreparedness of the body to accept the changes and demands of life. (Hurlock, 2007) Research conducted by Iliescu and Cotoi said that medical diagnosis and hospital environment can also affect the patient's psychological form of depression, anxiety, worry or a combination of all if the individual is not able to do resilience (Iliescu, 2013).

Failure of the resilience process will cause severe stress for a long time. The response of the body in response to stress causes the body's energy to increase. The energy released by the stressor will create a state of tension that causes discomfort for the patient. The discomfort that protracted will cause fatigue in the human body that can lead to death (Hanim, 2013).

2 METHODS

The research design used in this study is descriptive that aims to obtain a picture of the resilience of patients with chronic renal failure who underwent haemodialysis in Medan. The sample in this research were 117 people where the sampling technique used by accidental sampling. This research was conducted in the haemodialysis installation ward of Dr. Pringadi Hospital and H. Adam Malik General Hospital in Medan. The research instrument used was demographic data and resilience scale consisting of 25 statements adapted from the Resilience Scale (RS) owned by Wagnild and Young which then modified by the researchers. Instrument validated by Dr. Wiwik Sulistyarningsih with $V = 0.97$ and reliability value of Cronbach $\alpha = 0.810$ (Morton, 2012).

Data collection was done after getting permission from the related institution, researcher look for prospective respondent then explain to prospective respondents assisted by family about purpose, benefit, and how to fill questionnaires. After getting informed consent, respondents are welcome to fill out questionnaires or read by the researcher and gave the opportunity to the respondent if there was anything to ask. After all the data on the questionnaire had been collected, it is analyzed through several stages, starting from checking the completeness of the data (editing), coding, ensuring clean data, and measuring each respondent's answer by looking for percentage (tabulating) which is then presented in the form of frequency distribution tables.

3 RESULTS

The research design used in this study was descriptive that aimed to obtain a picture of the resilience of patients with chronic renal failure who underwent hemodialysis in Medan. The sample in this research was 117 people which the sampling technique by using accidental sampling. This research was conducted in the hemodialysis installation ward of Dr. Pirngadi Hospital and H. Adam Malik General

Hospital in Medan. The research instrument used was demographic data and resilience scale consisting of 25 statements adapted from the literature review.

Table 1. shows the majority of male respondents as many as 64 people (54.7%), age range 41-60 years as many as 66 people (56.4%), 53 senior high school education (45.3%), 48 self-employed (41%), the married status of 108 people (92.3%).

Table 1: Distribution of frequency based on the characteristics of respondents in Dr. Pirngadi Hospital and H. Adam Malik General Hospital in Medan (n = 117).

Characteristics of Respondents	(f)	(%)
Sex		
Male	64	54,7
Female	53	45,3
Age		
20-40 years	31	26,5
41-60 years	66	56,4
61-80 years	20	17,1
Education		
Primary School	17	14,5
Secondary School	21	17,9
High School	53	45,3
Bachelor	26	22,2
Occupation		
Housewives	43	36,8
Student	3	2,6
Self-employed	48	41,0
Civil Servant	9	7,7
Retired	14	12,0
Marital Status		
Single	9	7,7
Married	108	92,3

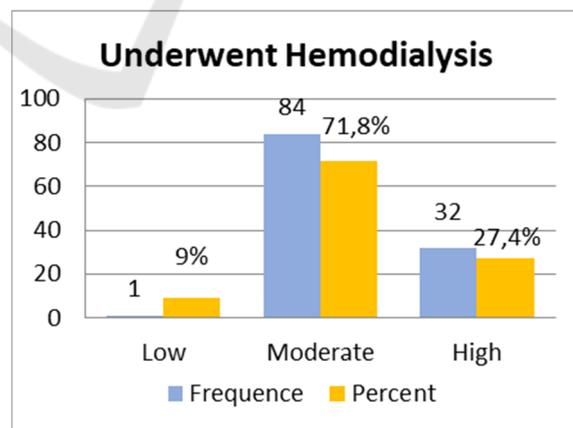


Figure 1: Resilience of respondents.

Figure 1 shows that patients resilient is in moderate resilience 84 of 117 respondents (71.8%), 32 respondents (27.4%) with high resilience, and 1 respondent (9%) with low resilience.

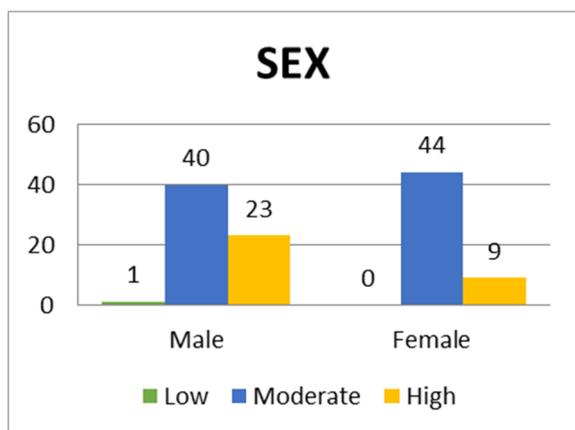


Figure 2: Sex of respondents.

Figure 2. shows that of 64 respondents of the male sex, 1 respondent has low resilience, 40 respondents have moderate resilience and 23 respondents have a high resilience. Of the 53 respondents of the female sex, there were no respondents had low resilience but 44 respondents had medium resilience and 9 respondents had a high resilience.

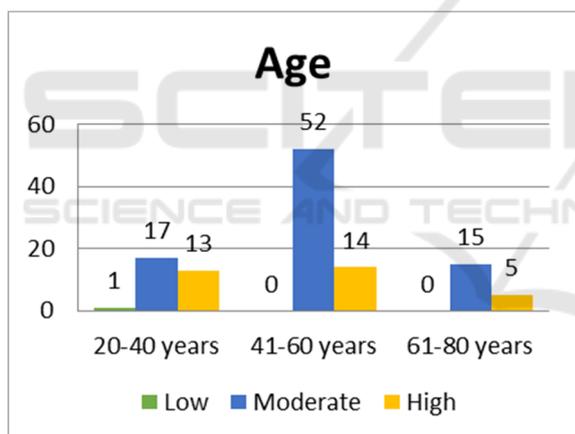


Figure 3: Sex of respondents.

Figure 3. showed that from 31 respondents aged 20-40 years there was 1 respondent with low resilience, 17 respondents with medium resilience, and 13 respondents with high resilience. A total of 66 respondents aged 41-60 had 14 respondents with medium resilience, and 52 respondents with high resilience. A total of 20 respondents aged 61-80 years there were 15 respondents with medium resilience, and 5 respondents with high resilience.

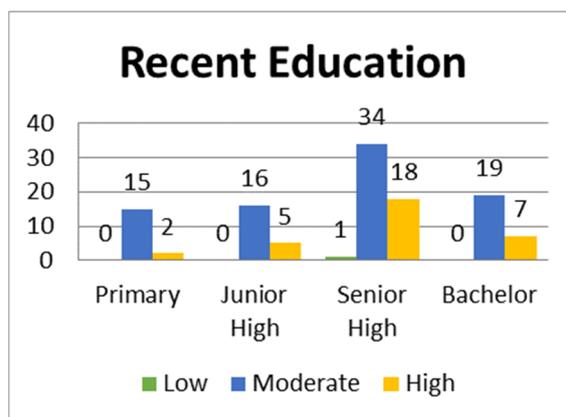


Figure 4: Education of respondents

Figure 4. shows that 17 respondents with primary school education had 15 respondents who had moderate resilience and 2 respondents had a high resilience. A total of 21 respondents with secondary school education had 16 respondents with medium resilience and 5 respondents have a high resilience. At the high school education there was 1 respondent have low resilience, 34 respondents with medium resilience and 18 respondents had a high resilience. Bachelor education as many as 26 respondents there were 19 respondents had moderate resilient and 7 respondents had a high resilience.

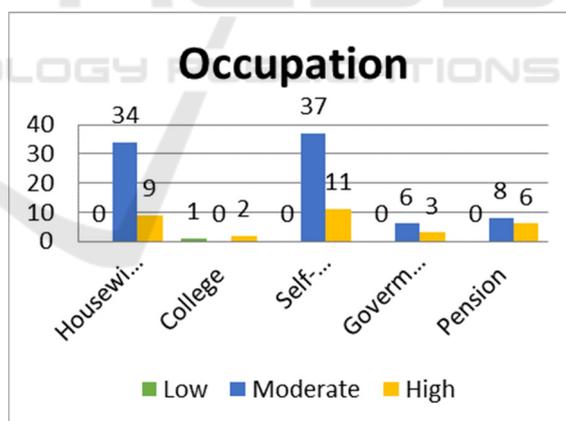


Figure 5: Occupation of respondents.

Figure 5 showed that of 43 housewives' respondents, 34 respondents with moderate resilience and 9 respondents with high resilience. A total of 3 respondents a college where 1 have low resilience and 2 respondents with high resilience. In the self-employed work of 48 respondents, there were 37 respondents with a moderate resilience and 11 respondents with high resilience. A total of 9 respondents work as government employees there were 6 respondents with medium resilience and 3

respondents with high resilience, while 14 respondents who had been pension there were 8 respondents with moderate resilience and 6 respondents with high resilience.

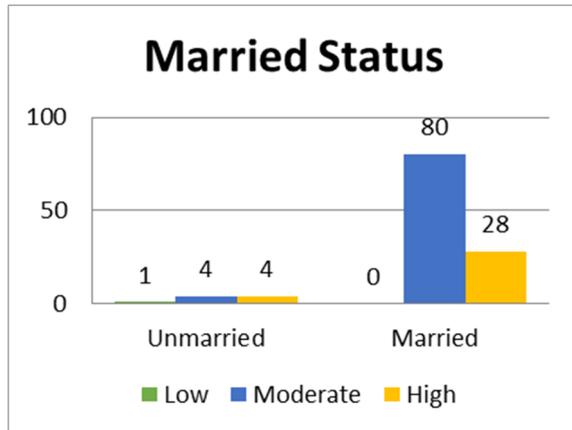


Figure 6: Married status of respondents.

Figure 6 Show that from 9 respondents with unmarried status there are 1 respondent had low resilience, 4 respondents with medium resilience and 4 respondents with high resilience. A total of 108 respondents with married status there were 80 respondents with medium resilience and 28 respondents with high resilience.

4 DISCUSSION

The results of this study showed that the resilience among 84 of 117 respondents of chronic renal failure who underwent haemodialysis in the city of Medan is in moderate resilience category with a percentage of 71.8%. Nisa argues that individual in the moderate resilience category shows that individuals have been able to adapt and survive in the face of illness but they have ups and downs and tend to be unstable in attitude (Mailani, 2015).

Mailani adds that chronic disease patients always try to use strategies to deal with the disease. They tend to get closer to God, get attention from family and spouse, have great hopes for recovery, and accept sincerely illness as part of God's trial. This can provide reinforcement and motivation for patients to stay their life as it once was (Nisa, 2016).

The results of this study obtained data that male respondents as much as 64 people (54.7%) more resilient than women as many as 53 people (45.2%). Purnomo argues that men tend to use problem-focused coping because men usually use ratio or logic, otherwise men are sometimes less emotional so

they prefer to directly solve the problems and directly face the source of stress (Reivich & Shatte, 2002).

Women are more likely to use emotion-focused coping because they are more emotionally or emotionally used, so they rarely use logic or ratios that make women more likely to regulate emotions in coping with sources of stress or religious settlement where women feel closer to God than men. Rinaldi argues that men often use a problem-solving approach and have an optimistic attitude than women, while women use patterns of helplessness than men. Men have confidence in solving problems and believe in their ability (competence) to master difficult tasks or situations, more positive than women (Rinaldi, 2010).

High resilient individuals (males) are able to adapt to a variety of conditions to change circumstances and are flexible in solving problems, whereas low resilient individuals (women) have little adaptive flexibility, are unable to react to changing circumstances, tend to be stubborn or chaotic when faced with change or pressure, as well as having difficulty adjusting after experiencing traumatic experiences (Rinaldi, 2010).

In this study, the most resilient group was in the 41-60 years age range of 66 people (56.4%). Hurlock argues that individuals between a 41-60 years age range are referred to as middle adulthood where at this time there will be a decline in physical and psychological ability, but individuals in this period have been able to determine their problems adequately both so stable enough and mature emotionally in the face of life problems, especially the diseases he suffered. Individuals who have reached emotional maturity will be able to control their emotions, can think well by looking at the problem objectively and able to take attitude and decision (Septiyan, 2013). According to Hurlock this period is a period of financial and social success including power and prestige. This is also a happy time for some couples, although at this time the children do not live with parents anymore, but actually feel happier because they feel free to reach a career and spend more free time with a partner than young adult so that tend to respond to an illness with an open attitude towards their partner (Septiyan, 2013).

The results of this study obtained data that the respondent's education at high school level has more resilient as many as 53 people (45.2%). According to Entjang (1985 in Asiah, 2005) argues that the level of education influences the individual mindset where high levels of education will broaden his way of thinking. (Setiasih, 2012) The higher the level of education the tolerance and control of the stressor will

be better, other than that individuals who have a higher education will be better cognitive development than a lower education so that will have a more realistic assessment and make the disease is something that must be faced (Sarafino, 2006).

Widakdo and Besral argue that higher-educated patients have better skills and knowledge that tend to be able to overcome life problems, whereas low education will have low knowledge and ability so that it has limited in coping pattern to the problems experienced (Siburian & Wahyuni, 2012).

Reivich & Shatte also add that individuals who have a broad mindset will have good cognitive flexibility so that individuals with good cognitive flexibility will have good resilience as well (Smeltzer & Bare, 2002).

Work is also very influential on mental health. The results of this study obtained data that the majority of respondents who work as self-employed more resilient as many as 48 people (41%). Setiasih argues that work is one of the most important aspects of life for the individual. Work also serves as a source of identity, a source of autonomy, giving opportunities to develop skills and creativity, a source of purpose in life, a source of income and a sense of security, and the source of other activities, such as recreation. Individuals who have jobs have a positive effect on mental health, where the subjective well being of individuals who have a job is better than subjective wellbeing individuals who do not have a job. Individuals who do not have a job indicate that there is no experience to gain employment benefits that make individual subjective wellbeing low. If they do not have a job, they have no income and no access to psychological experience, whereas by having a job the individual will have a good psychological experience (Tama, 2009).

Judging from the marital status of respondents, as many as 108 people (92.3%) married status are more resilient than unmarried. Taylor and Francis argue that the support of spouse and family is very influential on the mental health of family members. Family social support can provide positive results on health and wellbeing in patients with chronic diseases (Wagnild & Young, 1993).

Couples 'and families' social support have a positive or significant influence with high resilience. Social support is one factor that can make a person survive in any situation or in psychology is categorized as a manifestation of resilience. The higher the social support of spouses and families to sick family members, the higher the resilience (Widakdo & Besral, 2013).

5 CONCLUSION

The resilience of chronic renal failure patients undergoing hemodialysis in Medan City is in moderate resilience category, meaning that individuals have been able to adapt and survive in the face of illness but they have ups and downs and tend to be unstable in their attitude. The mental health of the patient facing his illness is also influenced by several factors which will affect the ability of the individual to adapt and face the psychosocial effects he/she experienced, including the factors of gender, age, education, occupation, and status.

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